ABSTRACT OF THE DISCLOSURE

A semiconductor device includes: a silicon substrate, having a main surface, in which trenches are formed; element isolation oxide films filling in trenches; a tunnel oxide film, formed on main surface located between element isolation oxide film and element isolation oxide film, having birds beak portions in birds beak forms that bring into contact with element isolation oxide film and element isolation oxide film, respectively; and a polysilicon film, formed on tunnel oxide film, having a thickness exceeding 0 and being less than 50 nm in an intermediate portion between element isolation oxide film and element isolation oxide film, and being thinner than the above thickness on birds beak portions. Thereby, it is possible to provide a semiconductor device wherein birds beaks are formed in the gate insulating film so as to have the desired dimensions and wherein the gate insulating film has excellent electrical characteristics.